

STATUS OF CLAIMS

Claims 1-22 have been cancelled.

23. (NEW) A process for water content material determination comprising: evaporating and combusting an aqueous sample in at least one heating vessel equipped with a heating facility, feeding the combusting product in a transport flow leading to a detector, determining the concentration of a gaseous compound of the water content material, and wherein a calibration of the detector is performed with a predetermined amount of a calibration gas which contains a predetermined concentration of the element corresponding to the water content material.

24. (NEW) The process according to claim 23, wherein the water content material being determined is organic carbon content and/or nitrogen.

25. (NEW) The process of claim 23, wherein the calibration gas has a predetermined CO₂ content for determining the amount of organic carbon (TOC) in a plurality of measured samples.

26. (NEW) The process of claim 23, wherein the predetermined amount of calibration gas is set by filling a reservoir with one of a known volume of gas under

atmospheric or with pressure compensation, which the flow of transport gas flows through after filling with the calibration gas.

27. (NEW) The process of claim 26, wherein the reservoir is a section of a hose.

28. (NEW) The process of claim 23, wherein during a calibration procedure, the calibration gas is fed into the heating vessel several times, each time recording the water content material in the detector.

29. (NEW) The process of claim 28, wherein the calibration takes place in several steps with a large number of different calibration gases containing different predetermined amounts of the element to be detected.

30. (NEW) The process of claim 23, wherein a range under a measured signal peak on the detector is integrated and scaled to the predetermined content of the element in the calibration gas.

31. (NEW) The process of claim 30, wherein a predetermined correction factor is used for scaling.

32. (NEW) An apparatus for determining water content material, comprising a measured sample feeding unit, a heating vessel having inlet and outlet ends, a transport gas source, a detector unit arranged at the outlet end of the heating vessel, a flow path linking the inlet end of the heating vessel to the transport gas source, the measured sample feeding unit being connected and locked to the transport gas source, at least one calibrating gas reservoir integrated into the flow path of the transport gas flows, and the calibration taking place in at least one of one or several steps with a large number of different calibration gases containing different predetermined amounts of the element to be detected.

33. (NEW) The apparatus of claim 32, further comprising at least one gas cylinder containing calibration gas and connected in a lockable fashion to the flow path of the transport gas.

34. (NEW) The apparatus of claim 33, wherein the calibration gas has a predetermined CO₂ concentration.

35. (NEW) The apparatus of claim 33, wherein a section of the transport gas flow path is constituted by a hose section of a predetermined volume, said gas cylinder being connectible to said hose section.

36. (NEW) The apparatus of claim 33, further comprising a plurality of gas cylinders containing the calibration gas in different concentrations, said gas cylinders being connectible to the transport gas flow path and being capable of being individually shut off.